

TEST COMPANY
TEST STREET
TEST CITY
TS 12345-6789

SAME

	100	31300	11/06/95	NET 30	12/06/95	TESTSALES
	BEST WAY		11/06/95	NET 30		
1 CT	00000300	HIGH ALTITUDE WATERMELON			1.01	1.01
1 PK	01100517	SPARTAN SEEDS			2.39	2.39
9 PK	04569870	NORTHERN LITE BLUE SPRUCE			858.32	7,724.88
12 BX	11005004	BUSH GREEN SEEDS			2.50	30.00
12 CT	11005011	LASO RED SEEDS			892.23	10,706.76
26 PK	11005018	EARLY BANTAM SEEDS			.38	9.88
5 BX	11057893	AFRICAN DAISY, SEEDS			2.35	11.75
1 PK	15975365	HEAVY OAK			129.09	129.09
33 BX	32746510	HOPS BREWING LIGHT			1.20	39.60
33 BX	32746510	HOPS BREWING LIGHT			1.20	39.60
6 EA	46578913	SEED SURVEYING SITE			50.00	300.00
2 BX	56413213	POT POT			7.65	15.30
80 PK	65412384	SEED SCRUBBER			888.79	71,103.20
1 PK	84512023	OREGON SPRING TOMATO SEED			.97	.97
2 DZ	96325874	PINEAPPLE-ORANGE SEEDS			1.29	2.58
11 BX	98412006	BLACK BEAUTY ZUCCHINI			2.30	25.30
5 EA	98546320	FROZEN JUICE PROCESSOR			109.90	549.50

Thank You

Because you have ordered
over \$500 of seeds this
year, on your next seed
order you will receive
a 10% discount.

\$90,691.81
\$90,691.81

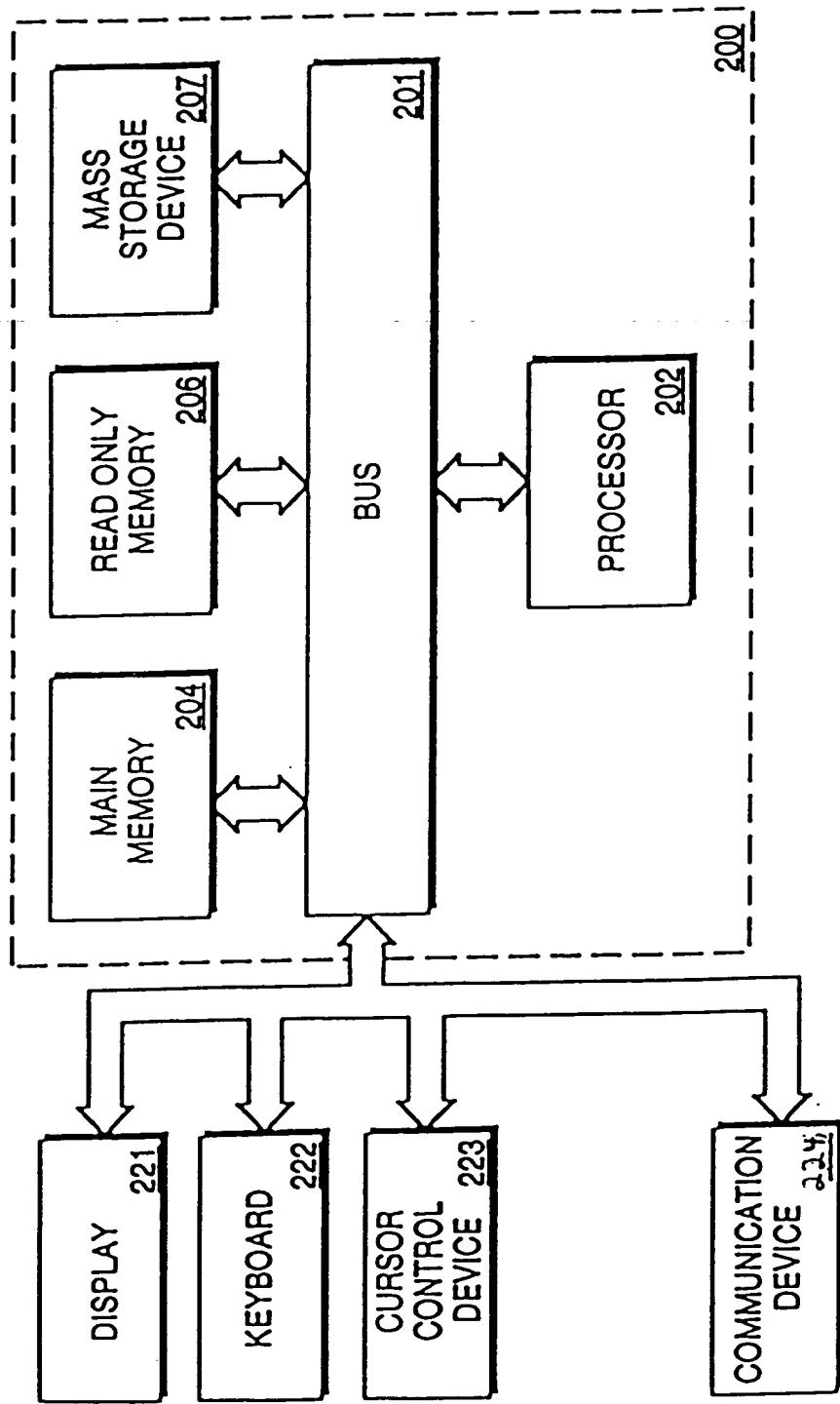
12/06/95

F. figue 1A An example of line data produced by an application program (Prior Art)

Super Sun Seeds		Other Return Date	
TEST COMPANY	TEST STREET	TEST CITY	TS 12345-6789
1 CT	00000300	HIGH ALTITUDE WATERMELON	
1 PK	01100517	SPARTAN SEEDS	
9 PK	04569870	NORTHERN LITE BLUE SPRUCE	
12 BX	11005004	BUSH GREEN SEEDS	
12 CT	11005011	LASO RED SEEDS	
26 PK	11005018	EARLY BANTAM SEEDS	
5 BX	11057893	AFRICAN DAISY, SEEDS	
1 PK	15975365	HEAVY OAK	
33 BX	32746510	HOPS BREWING LIGHT	
33 BX	32746510	HOPS BREWING LIGHT	
6 EA	46578913	SEED SURVEYING SITE	
2 BX	56413213	POT POT	
80 PK	65412384	SEED SCRUBBER	
1 PK	84512023	OREGON SPRING TOMATO SEED	
2 DZ	96325874	PINEAPPLE-ORANGE SEEDS	
11 BX	98412006	BLACK BEAUTY ZUCCHINI	
5 EA	98546320	FROZEN JUICE PROCESSOR	
Total Due: \$90,691.81			
TEST COMPANY		TEST STREET	TEST CITY
TS 12345-6789		W 123456789	TS 123456789
Packing List			
Customer Copy			
File Copy			

F. figue 1B An example of customer invoice produced using line data. (prior art)

Fig. 2



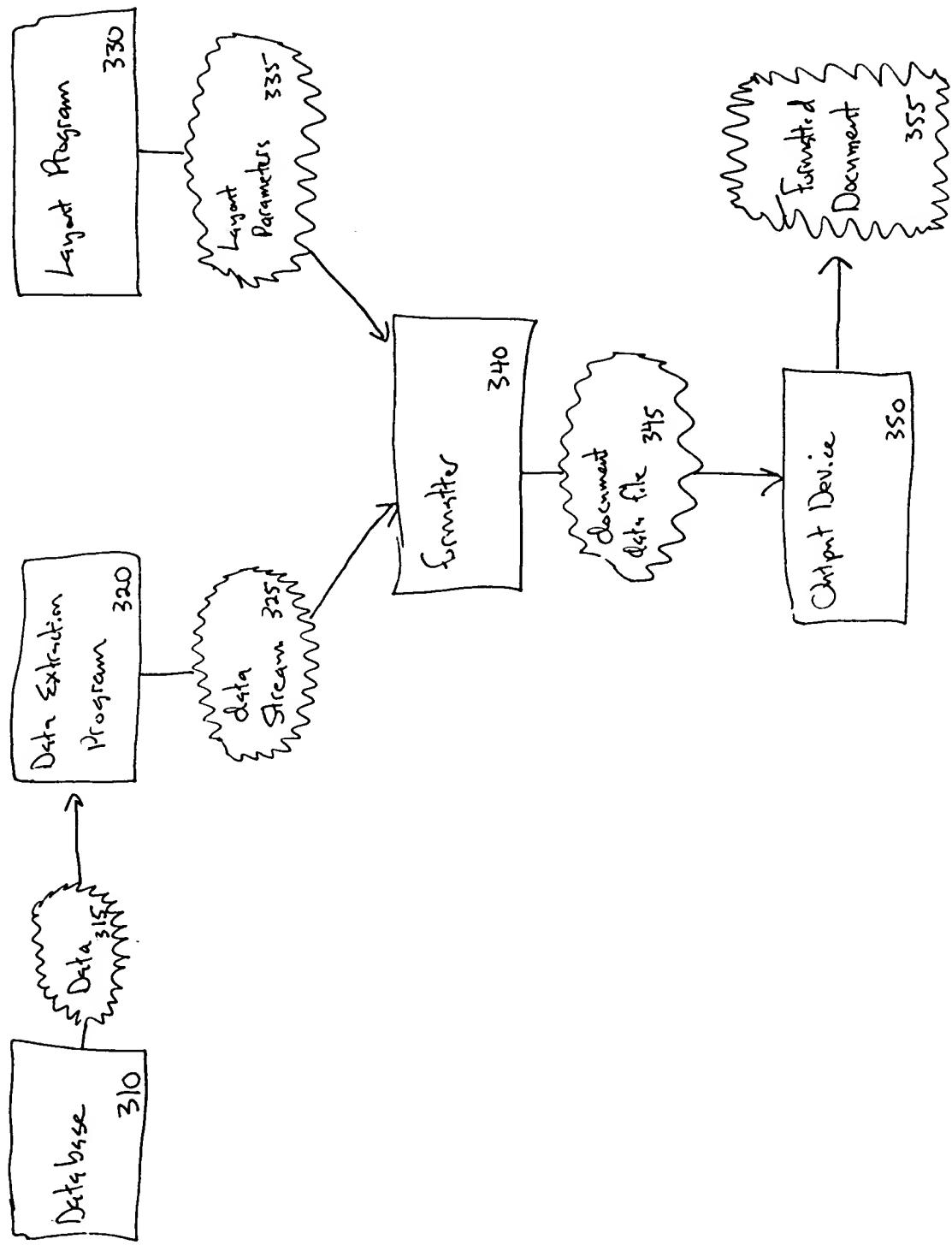


Figure 3

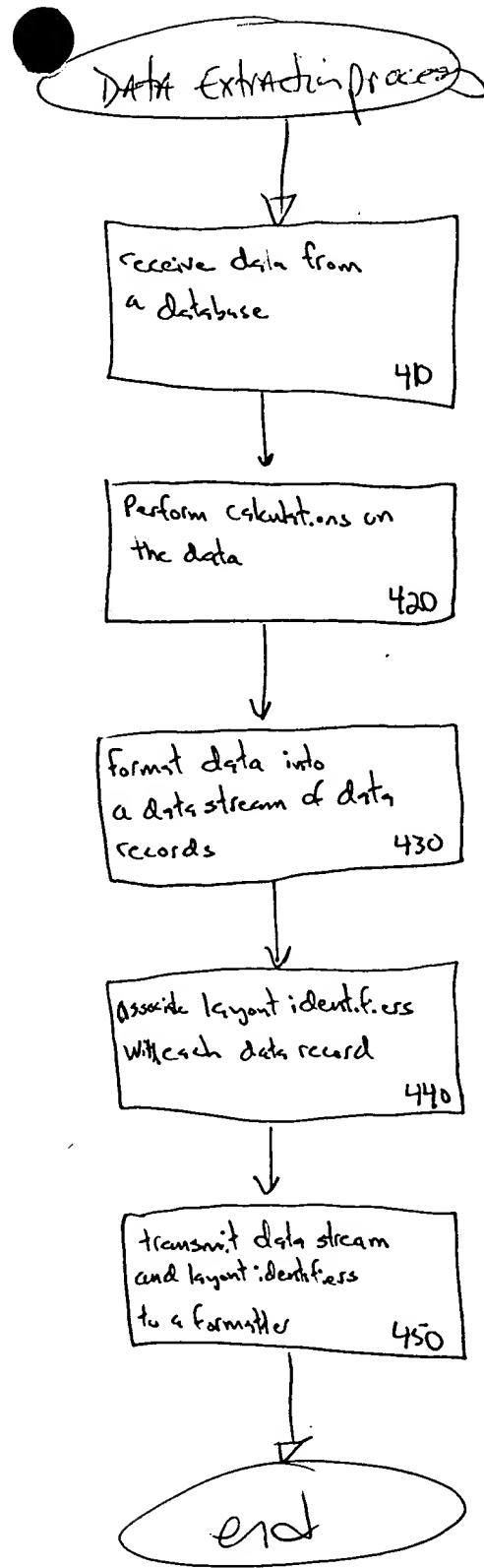


Figure 4

A flow Diagram for an Exemplary Data Extraction Program

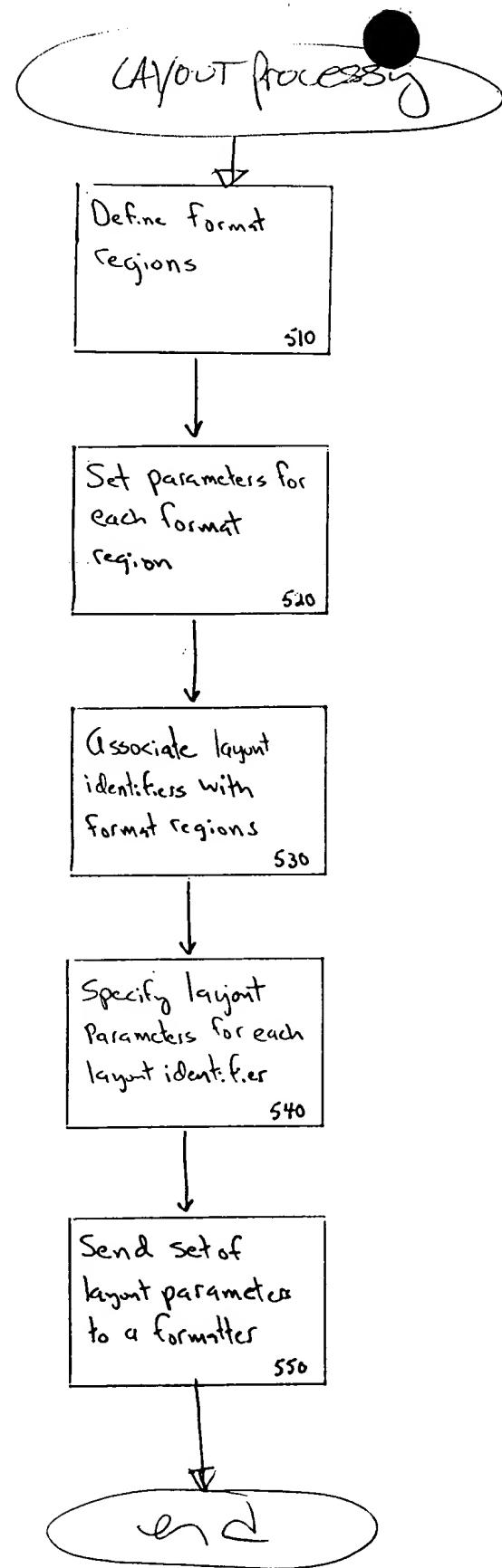


Figure 5 Flow Diagram for an Exemplary Layout Program

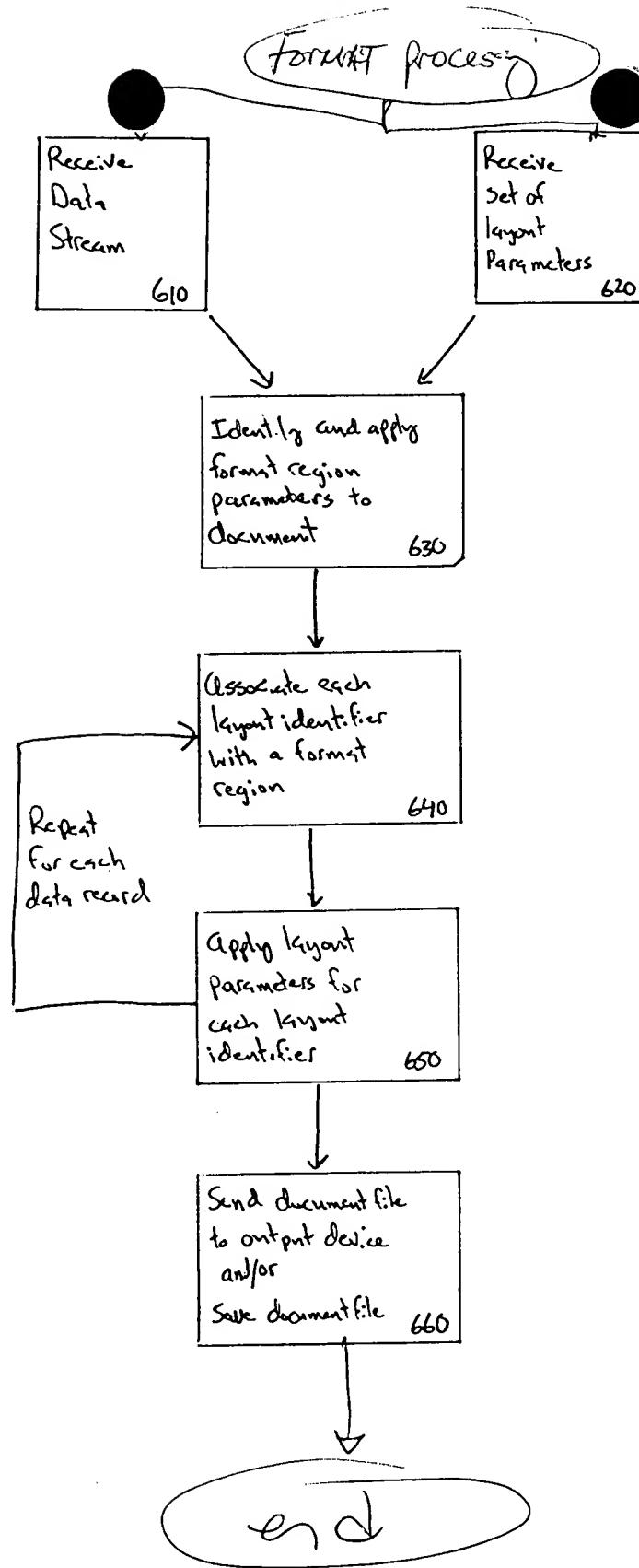


Figure 6 flow Diagram for an Exemplary formatter

700

1111111112222222233333334444444555555556666666667777777778
1234567890123456789012345678901234567890123456789012345678901234567890

715	statmid	026-257311	Chubby Checker	123 Redlight Lane	Twistnshout	MA 02345
	statsum	\$2591.24	\$1946.93	\$1956.43	\$0.00	\$2581.72
	crheader					
	crdata	DEPOSIT	01/05/90	\$ 26.90		
	crdata	AUTO DEPOSIT	01/15/90	\$ 954.27		
	crdata	AUTO DEPOSIT	01/30/90	\$ 954.27		
	crdata	INTEREST	01/31/90	\$ 11.49		
	cktotal			\$1946.93		
720	ckheader					
	ckdatal	352	01/04/90	\$ 321.50		
	ckdatal	353	01/05/90	\$ 100.00		
	ckdatal	354	01/10/90	\$ 122.30		
	ckdatar	355	01/11/90	\$ 59.95		
	ckdatar	356	01/15/90	\$ 852.33		
	ckdatar	357	01/30/90	\$ 500.35		
	cktotal			\$1956.43		
	balhead					
	baldatal		01/04/90	\$2269.74		
	baldatal		01/05/90	\$2196.64		
	baldatal		01/10/90	\$2074.34		
	baldataar		01/11/90	\$2014.39		
	baldataar		01/15/90	\$2116.33		
	baldataar		01/30/90	\$2570.25		
	baltotal			\$2581.74		
	statrail					

layout
identifiers

line data records 710

705

Figure 7 An example of a Data Stream of data records with layout identifiers
for a bank statement

Big Brother Bank

"We watch over you"

P.O. Box 1573
Beantown, MA 02116

Account Number: 026-257311
Statement Begin Date: JAN 02, 1990
Statement End Date: FEB 01, 1990

Chubby Checker
123 Redlight Lane
Twistnshout, MA 02345

Super Checking Account Activity

810

Beginning Balance	Credits	Debits	Service Charge	Ending Balance
\$2591.24	\$1946.93	\$1956.43	\$0.00	\$2581.74

Credits	Description	Date	Amount
DEPOSIT		01-05-90	\$ 26.90
AUTO DEPOSIT		01-15-90	\$ 954.27
AUTO DEPOSIT		01-30-90	\$ 954.27
INTEREST		01-31-90	\$ 11.49
Total Credits			\$1946.93

Checks	Check No.	Date	Amount	Check No.	Date	Amount
352	01/04/90	\$ 321.50	355	01/11/90	\$ 59.95	
353	01/05/90	\$ 100.00	356	01/15/90	\$ 852.33	
354	01/10/90	\$ 122.30	357	01/30/90	\$ 500.35	
Total Checks			810	\$1956.43		

Daily Balances	Date	Balance	Date	Balance
01/04/90	\$2269.74	01/11/90	\$2014.39	
01/05/90	\$2196.64	01/15/90	\$2116.33	
01/10/90	\$2074.34	01/30/90	\$2570.25	
Final Balance				\$2581.74

Interest Rate As of 01-04 ... 5.321%

Page 1

Figure 8 An Example of a Bank Statement

```

*****  

/* statsum BODY  

*****  

905 - LAYOUT statsum BODY ;  

910 - FIELD TEXT C'Super Checking Account Activity'  

      POSITION 0 in 2.0 in  

      FONT super ; /* Static text - Super Checking */  

      DRAWGRAPHIC LINE ACROSS 7.5 IN BOLD  

      POSITION 0 .15 in  

      repeat down 2 spaced 1 mm;  

      FIELD TEXT C'Beginning Balance'  

      POSITION .3 in 2.4 in  

      FONT head ; /* Static text - first header */  

      FIELD TEXT C'Credits'  

      POSITION 2.4 in 2.4 in  

      FONT head ; /* Static text - first header */  

      FIELD TEXT C'Debits'  

      POSITION 3.6 in 2.4 in  

      FONT head ; /* Static text - first header */  

      FIELD TEXT C'Service Charge'  

      POSITION 4.8 in 2.4 in  

      FONT head ; /* Static text - first header */  

      FIELD TEXT C'Ending Balance'  

      POSITION 6.3 in 2.4 in  

      FONT head ; /* Static text - first header */  

      FIELD START 11 LENGTH 8  

      POSITION 1.4 in 2.6 in  

      FONT varb ; /* Variable text - Beg balance */  

      FIELD START 20 LENGTH 8  

      POSITION 3.1 in 2.6 in  

      FONT varb ; /* Variable text - Credits */  

      FIELD START 30 LENGTH 8  

      POSITION 4.4 in 2.6 in  

      FONT varb ; /* Variable text - Debits */  

      FIELD START 40 LENGTH 5  

      POSITION 5.7 in 2.6 in  

      FONT varb ; /* Variable text - Service Chrg */  

      FIELD START 50 LENGTH 8  

      POSITION 7.3 in 2.6 in  

      FONT varb ; /* Variable text - End Balance */  

      DRAWGRAPHIC LINE ACROSS 7.5 IN BOLD  

      POSITION 0 .7 in;

```

figure 9

Layout Parameters for the
 <statsum> layout identifier in the Bank
 Statement example

```
*****  
** ckdata1 BODY left side **  
*****  
1005 — [ LAYOUT ckdata1 BODY GROUP;  
          FIELD START 12 LENGTH 3  
          POSITION 1.4 in NEXT  
          FONT varb ; /* Variable text - Check number */  
1010 — [ FIELD START 24 LENGTH 8  
          POSITION 2.4 in CURRENT  
          FONT varb ; /* Variable text - Date */  
1015 — [ FIELD START 34 LENGTH 8 ALIGN RIGHT  
          POSITION 4.2 in CURRENT  
          FONT varb ; /* Variable text - Amount */  
1020 — ]
```

Figure 10 layout parameters for the "ckdata1" layout
identifier in the Bank Statement Example

1100

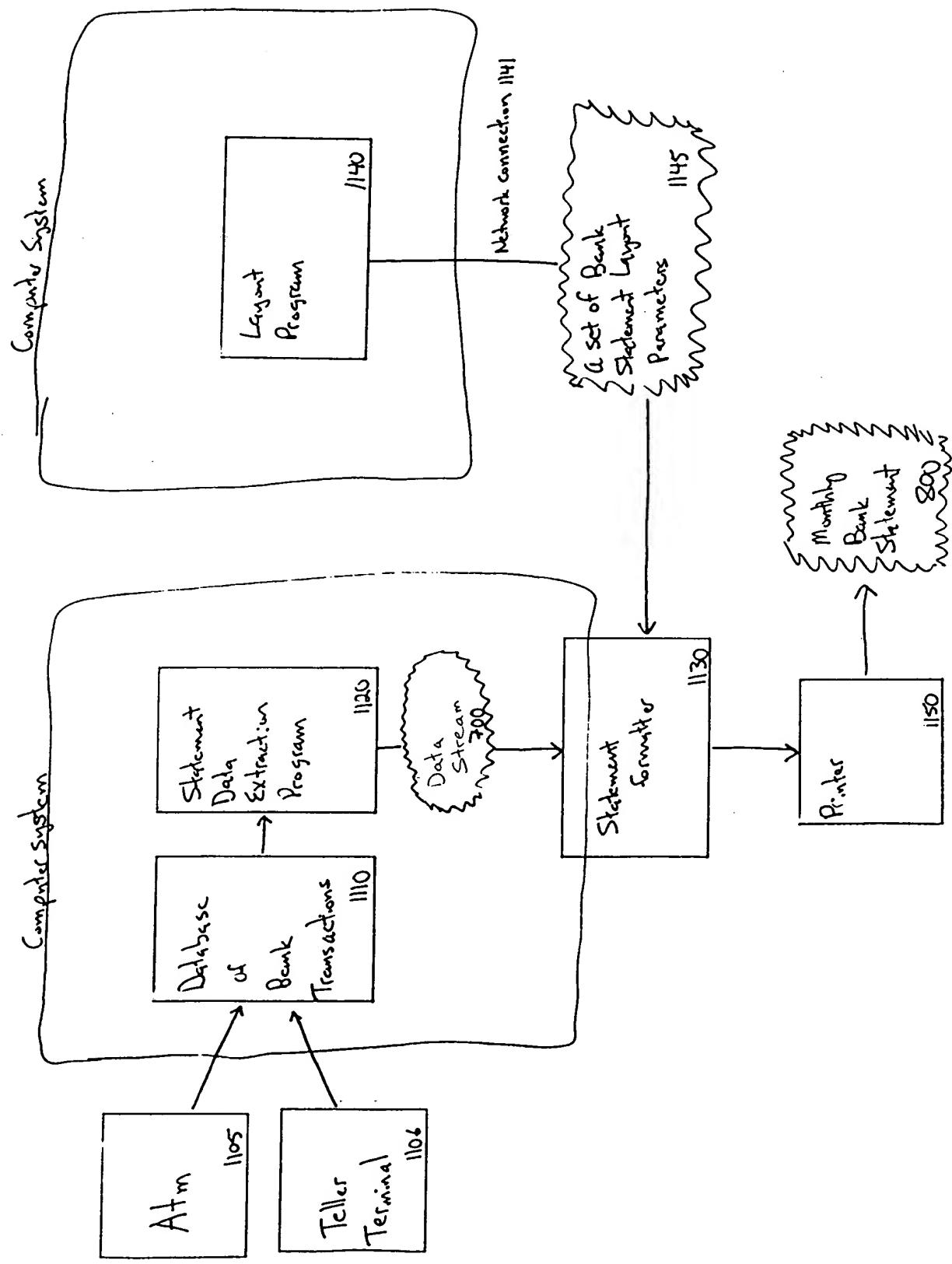


Figure 11